In the Claims:

1-7. (Canceled).

- 8. (New) Fuel cell stack, comprising:
- a plurality of fuel cell elements and
- a plurality of separating plates, a respective one of the separating plates being located between a respective pair of fuel cell elements,

at least one inside supply channel being provided to supply a combustion gas and at least one inside discharge channel being provided to discharge an exhaust gas, said channels extends in a direction in which the fuel cell elements and separating plates are stacked,

a supply of combustion gas on a first side of the fuel cell elements and a supply of oxidizer on an opposite side of the fuel cell elements,

wherein, on the first side of the fuel cell elements:

- a plurality parallel lengthwise channels are provided for routing of the combustion gas,
- a distributor zone which connects the supply channel to first ends of the lengthwise channels, and
- a collecting zone which connects the discharge channel to second ends of the lengthwise channels, and

wherein, on the second side of the fuel cell elements, an oxidizer guide is formed which runs in the direction of the lengthwise channels and which is open to sides of the fuel cell stack for supplying of the oxidizer.

- 9. (New) Fuel cell stack as claimed in claim 8, wherein the at least one supply channel and the at least one discharge channel are located in an area at one side of the fuel cell stack.
- 10. (New) Fuel cell stack as claimed in claim 8, wherein the at least one supply channel and the at least one discharge channel are arranged by diagonally opposite corners of the fuel cell stack.

- 11. (New) Fuel cell stack as claimed in claim 8, wherein the distributor zone tapers from the supply channel along the first ends of the lengthwise channels and the collecting zone tapers from the discharge channel along the second ends of the lengthwise channels.
- 12. (New) Fuel cell stack as claimed in claim 8, wherein the distributor zone and the collecting zone are made symmetrical with respect to the fuel cell elements.
- 13. (New) Fuel cell stack as claimed in claim 1, wherein the distributor zone and the collecting zone are provided with cooling surfaces.
- 14. (New) Fuel cell stack as claimed in claim 1, wherein at least one of the distributor zone and the collecting zone have heat exchange surfaces by which heat energy is transferable between the combustion gas and the oxidizer.